

NARROW GAUGE

D O W N U N D E R

WINTER/SPRING 1997

AUSTRALIA \$9.50

QUEENSLAND MODELLING

1:32 SCALE SWAMP DIORAMA

BALANCING ROLLING STOCK

NARROW GAUGE CONVENTION

BALDWIN 2-6-0 DRAWINGS



NGDU 2:2 1997

NARROW GAUGE

DOWN UNDER

VOLUME 2 No 2 WINTER / SPRING 1997

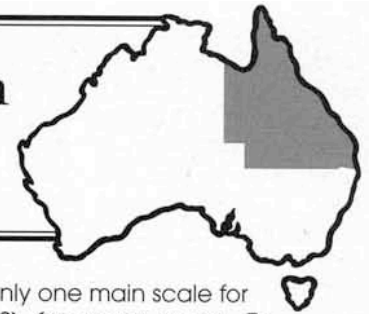
ON THE COVER

Queensland's narrow gauge railway systems have fascinated modellers of that state for many years. Here, Bundaberg Fowler No. 5 crosses Canetoad Gully with an empty 'bin' train. The fine modelling is the work of Steve Malone. The Canetoad Gully story begins on page 7. Photograph; Tony Weber

NARROW GAUGE — 3 — DOWN UNDER

O Scale Narrow Gauge Modelling in Queensland

STEVE MALONE



IN THE BEGINNING - A HISTORY LESSON

My first narrow gauge modelling was in the early 1970's with some OO-9/HOn2-1/2 scale equipment on 9mm track to supplement my HO/OO layout. From this experience, I felt a larger scale for narrow gauge modelling would be much better, allowing better running, easier detailing and much better steam loco mechanisms. My work then continued into Sn3-1/2 modelling representing Queensland railways on 16.5mm track.

In the early 1980's my brother Chris enquired about what might be a good scale to represent Queensland 610mm gauge sugar cane railways. We investigated all options, ranging from HO, OO and S scales on 9mm track to the O scales of 1/4 inch, 7mm and 8.25 mm on 16mm track. Chris was at high school at the time so cost was a consideration. Our investigations led us to believe that 7mm=1' scale (1:43.5) was by far the best option (using 16.5mm track) and I believe this was a sound decision. In 7mm scale many inexpensive common HO and OO mechanisms and rolling stock parts fitted many popular bogie or 0-6-0 diesel and 0-6-2 steam loco types. Also 2' 6" gauge models could also be catered for in 1/4" scale (1:48) On2-1/2. The parts available in 7mm scale from the UK and 1/4" scale from the US would also be of great assistance. A group 7mm narrow gauge association was also set up in

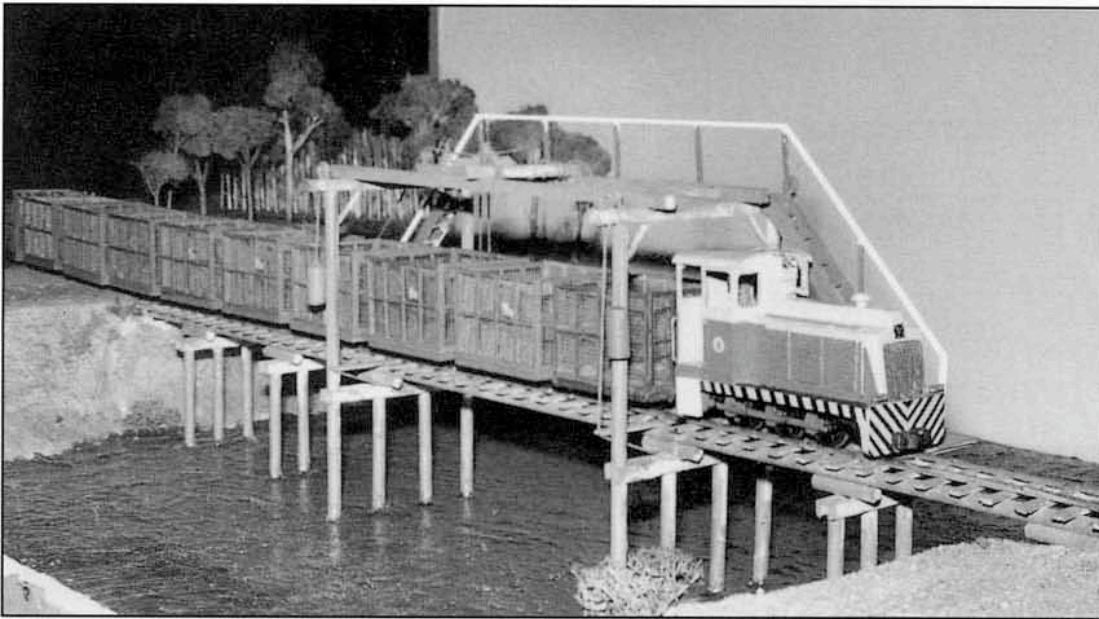
Zealand where there was only one main scale for serious modelling (Sn3-1/2) for many years. To quote a NSW modeller and publisher at that time, "If Queensland modellers could ever get their act together into modelling in one main scale, maybe then manufacturers can supply some kits and parts". This was another influencing factor in our decision making process. Keep things simple and go with the flow. Modelling time is short here in Queensland and we don't very often get snowed-in for weeks on end like our friends in colder climates. Fortunately, interest in modelling the Queensland systems is not new. Jim Fainges (for one) has been collecting and recording data since the 1950's.

PUBLIC DISPLAYS OF 'O' SCALE CANE RAILWAYS

Possibly the first display of 'O' scale cane train modelling in Queensland was in 1984 when my brother Chris displayed a 'River Depot' scene layout at the AMRA exhibition. Chris by this time had a good selection of locomotives and had perfected mass production of cane bin wagons and full height sugar cane growing in the fields. The layout represented the 'River Depot' scene on the Maroochy River on the Moreton Mill system. A feature of that layout was the unusual lift bridge where a span lifted to allow river boat traffic to pass. The exhibition had a visit from the then Commissioner for railways in Queensland, Mr

Mendoza who commented that the layout brought back fond memories when as a teenager he used to ride on the Moreton Mills Shay driven by his uncle.

Again in 1986, Chris displayed his cane modelling in 'O' scale, this time featuring a large mill scene complete with operating bin tippler. The layout was a point to point design which made for a busy weekends operation at the AMRA 3-day show. Favourable comments on this layout were seen in a review of that exhibition in the AMRM



ABOVE This scene from Chris Malone's display layout of 1984 features an unusual lift bridge. Crossing the bridge is a Clyde GM DHI-71 diesel hauling a rake of omnipresent cane bins. The loco has a Lima mechanism which operates smoothly. Chivers Finelines plan to release this loco in kit form at some stage. Photograph; Steve Malone

the UK around this time. A concern I had was that we were not going to make another anti-social niche in Queensland modelling circles. At that time there were in use for Queensland modelling at least seven scales using five different track gauges! I wished that we were like New

magazine of August 1986.

In 1988 a group effort of 'O' scale modellers led by Terry Paton from the 'Steamworks' museum in Brisbane, presented a large layout for the AMRA show held in Brisbane. This display measured 8.5m x 3m. Jim and Ian Fainges put most of the display together consisting of seven modules. Terry built an end module with a large trestle bridge and Chris and I built an inter-connecting module to put it all together. Our module also represented an out depot scene with basic loco facilities.

In 1993 the whole thing was repeated, except Terry's

module was no longer available so this gave me a good opportunity to build a new end module as a replacement. This was the beginnings of 'Cane Toad Gully'. At that time a friend of mine, Eric Lyon, was rebuilding his kitchen. I assisted in the demolition process and ended up salvaging enough timber and plywood to build the modules I needed. By this time 'O' scale modellers within the AMRA Qld. branch numbered around ten forming a great working group which meets monthly to share ideas and techniques.



ABOVE A scene from the Canetoad Gully exhibition layout showing Bundaberg Fowler loco No. 5 sitting on the inside loop with a passenger train while a Decauville loco sits on the main, waiting to do some shunting. No. 5 was built over a Lima BR 08 mechanism. Photograph; Graham Prideaux

My out depot modules grew by another three modules in 1994 to form a stand-alone 3m x 1.8m layout known as "Canetoad Gully". One of the new modules was scenicked while the other two were plain 'fiddle yard' areas.

Our group of narrow gauge modellers continued to build and display more layouts at the AMRA Qld. exhibitions over the following years. 1995 saw Jim and Ian Fainges present two 'O' scale narrow gauge layouts. Jim with his 0-9 'Greynite Quarries' running on 9mm track and Ian had his tin mining layout in 7mm scale running on 16.5mm track. For the 1996 exhibition the group assisted young modeller, Michael Bertucci with a 3.6m x 1.2m layout depicting a sugar mill scene named 'Platypus Creek Mill'.

From my experience over the years, 'O' scale narrow gauge modelling as we have approached it is very similar to Sn3-1/2 in many ways, ie, it can utilise inexpensive and common HO and OO scale parts within a casual framework. The added appeal of low cost and availability make it a good choice for the young modeller who may be short of cash but who is interested in modelling a local prototype.



ABOVE This photograph was shot on our 'Out depot' module at the 1988 Queensland AMRA exhibition. All locomotives are the work of Steve Malone. Featured from top left are; 'Eudlo' 0-6-0T Fowler, 'Petrie' 0-4-2T Fowler below it, Bundaberg Fowler No. 5 at top right and a freelance Krauss 0-6-2T in the foreground. Photograph; Steve Malone

CANETOAD GULLY - THE LAYOUT

As mentioned earlier this layout started life as a fill-in piece for the 1993 'O' scale narrow gauge display at the AMRA exhibition. It was realised at an early stage that these modules could grow into a stand-alone layout and construction methods facilitated these ideals.

OPPOSITE PAGE BELOW Seen here are some of Ken Howard's beautiful 'Tin Mining Railway' rolling stock passing over the trestle bridge that featured on the cover of the AMRM 25 year index book. Photograph; Steve Malone

We drew up a set of ideal criteria;

- light and easy to handle
- robust layout edges
- module sized to fit most vehicles
- simple, interesting track plan
- fold inside legs
- easy erection and assembly
- electrically simple
- foolproof electrical & jointing systems
- fun to operate

PLANNING

It is a good idea to do some sketches of your proposed modules to get an idea of how it will all work. Baseboard construction was designed using 70 x 20mm outer framework with smaller timber used for internal bracing where required. 6mm ply went on top and 9mm ply was used for the module outer profile boards. Two pieces of 40mm square timber swing down for the legs on each module. The outer profile boards are approximately 25mm above the 6mm ply top to allow room for the roadbed and scenery base. The material that we use is the high density polystyrene foam sheet made for signage purposes. The accompanying layout plan shows how all the modules fit together to form 'Canetoad Gully' the layout.

CONSTRUCTION

The woodwork of the modules was carefully screwed and glued together ensuring that everything was square and true. The sheet of high density polystyrene foam was glued to the frame with white wood glue. The legs are drilled at the base to accept 12mm levelling bolts. The modules are matched together with 10mm wood dowels and held together with 1/4" bolts and wing nuts. A sliding window brace is fitted to the legs to hold them down or up as desired. It was decided not to include any kind of backdrop to the layout as I believe that no backdrop is preferable to one poorly done. It would also have made operation at home almost impossible.



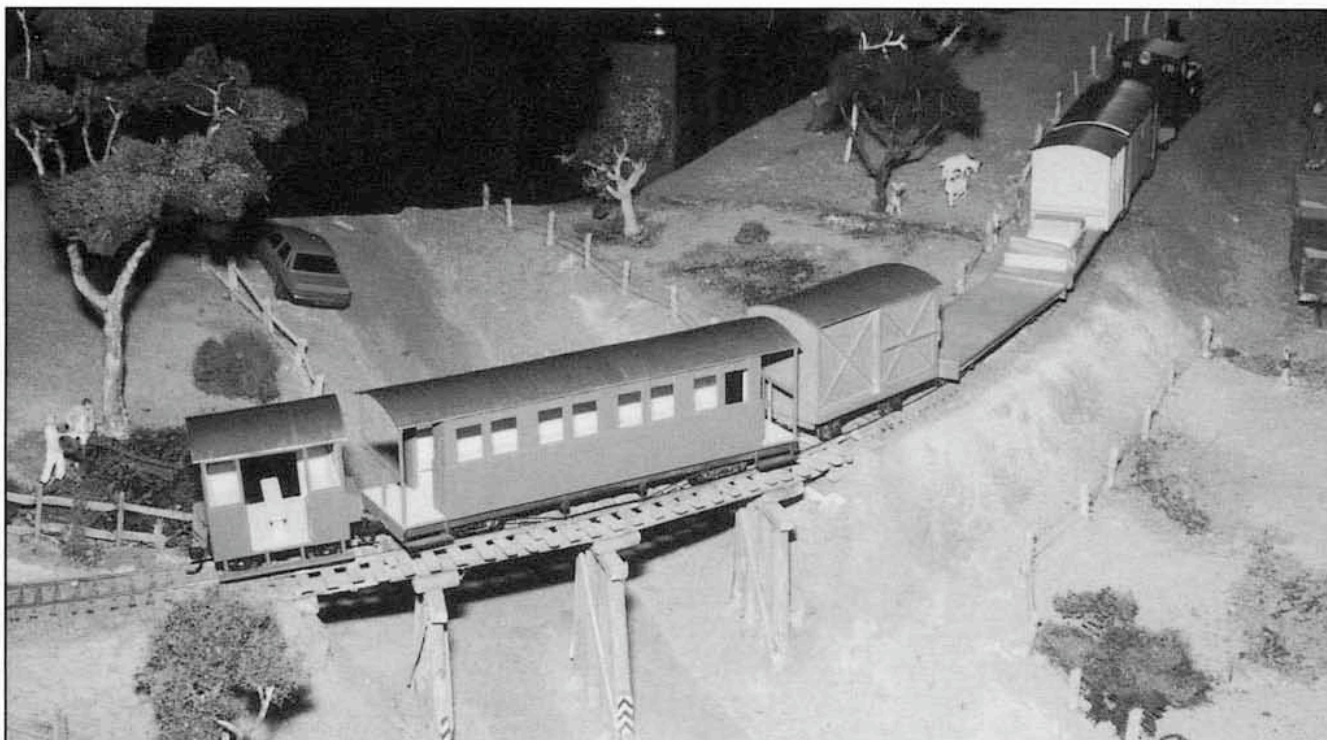
ABOVE A highlight of the 1993 AMRA exhibition layout was this (typically) Queensland street scene built by Jim Fainges. Featured is the 'Railway Arms' Hotel, and main street Emporium, flanked by a small barber shop. Photograph; Steve Malone

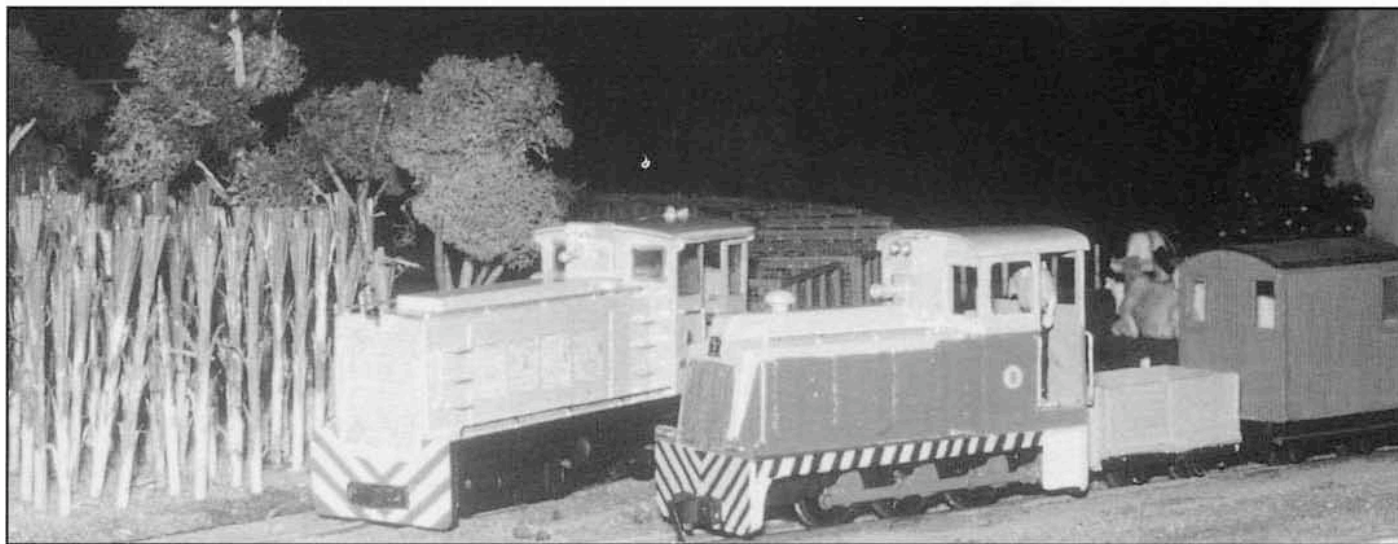
TRACKWORK

Peco track was used throughout, some of it rescued from earlier layouts. The outer 'main line' is Peco 0-16.5 track with matching points at three locations. This track is ballasted in the usual way. Elsewhere, Peco HO/OO track is used on 'secondary' tracks. These tracks laid in a shallow hollowed section on the foam base and are almost buried in pine sawdust, leaving only the rail heads exposed. These tracks are weighted down while the white glue sets up.

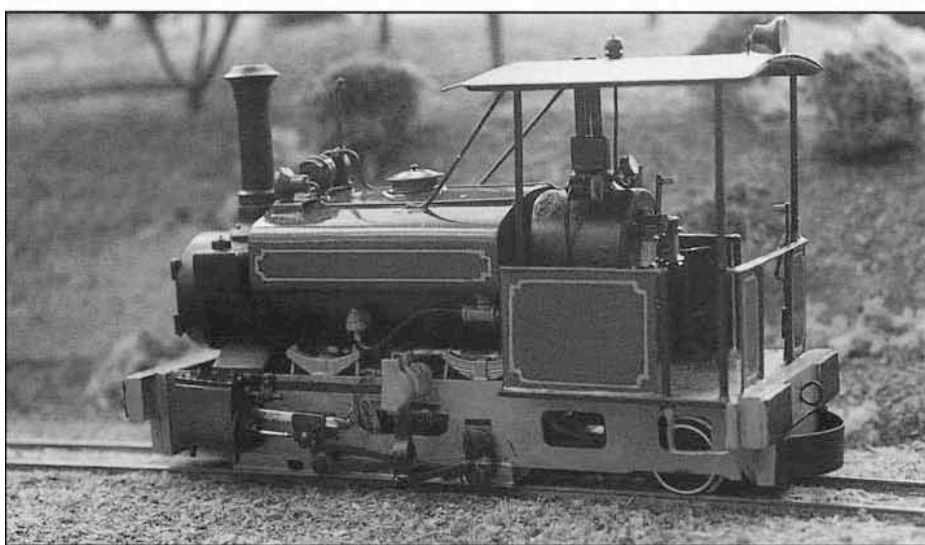
To assist in the prevention of bad track joint alignment problems on curves, the sleepers were removed from the ends of each section of track for about 75mm. The rails were then pre-bent to the required radius, the sleepers replaced into position and the track joint assembled. This has proven to be a most successful procedure.

Track joints at the baseboard edges are done carefully to ensure trouble-free operation and matching on



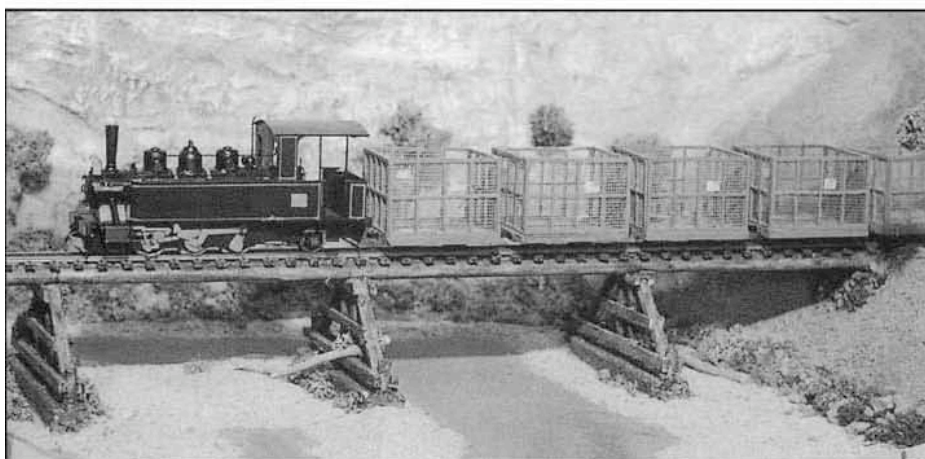


ABOVE Chris Malone's EM Baldwin Bogie loco and a Clyde DHL-71 pass during operations at the 1984 AMRA exhibition. Note the tiny Innisfail Tramway brakevan and the individually made cane stalks. Photograph: Steve Malone



ABOVE Steve Malone's 0-4-2ST Pleystoe Mill Fowler loco is seen during a quiet moment at the 1994 exhibition. Note the hand made Joy valve gear, leaf springs and outside frame. The loco is painted deep green with red trim. Photograph: Steve Malone

BELOW The prototype of this 0-6-2T was built by the Perry Company of South Australia and spent it's final years working at the Marian Sugar Mills in Mackay. It still survives today in far North New South Wales at a tourist railway. The model started life as a OO scale Lima 0-6-0 Class 08 diesel of the British Railways. Photograph: Steve Malone



repeated assembly. The old idea of using a piece of PC board under the ends of the rails for the last 20mms either side of the baseboard edge is used. In my situation with the foam base, it was necessary to add an extra foundation for the PC board to be screwed to for a firm finish. The rails are soldered to this board allowing for minute adjustment if necessary ~ a rare situation indeed. In some cases the PC board was cut and filed to match the nearby sleepers. Naturally, the PC board has a gap cut between the rails to avoid short circuits.

ROLLINGSTOCK

O scale modelling can be a realm of extremes. Locomotives can range from a cheap HO diesel with a larger cab to a fully scratchbuilt work of art. Rolling stock can range from plain bogie wagons made from a strip of masonite overlaid with scribed wood to passenger cars that feature such details as working roller blinds. Common wagons such as the chopped cane bins have been 'mass produced' in plasticbond or similar medium cast in silicon rubber moulds.

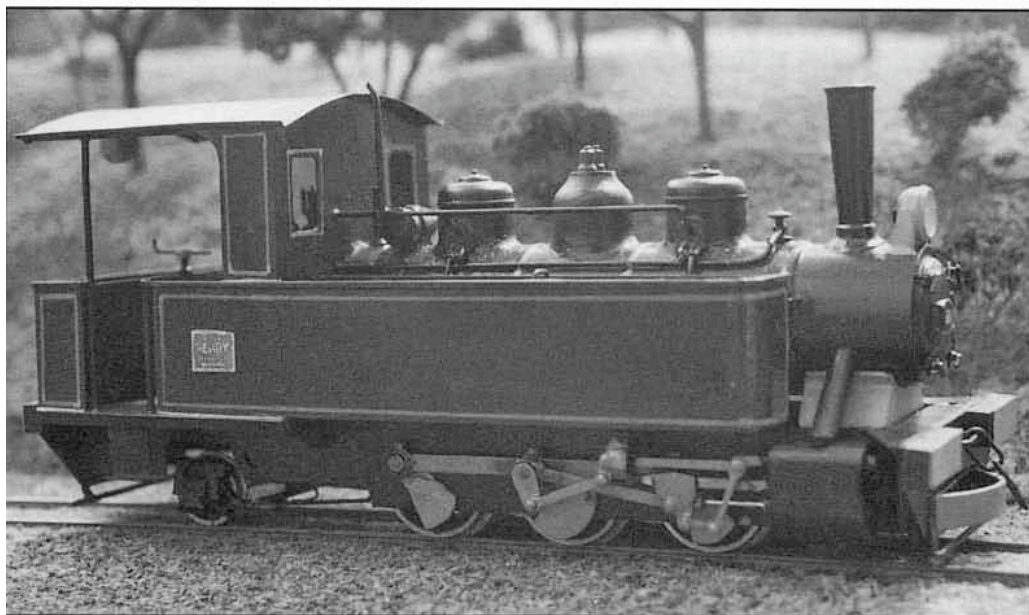
Locomotive building is my favourite part of the hobby. My first cane loco was of the 'John Fowler' 0-6-0T Eudlo from the Moreton Mill finished in 1984. I have since built several other cane locomotives of various kinds. Generally, I prefer styrene and perspex for diesels and brass for steam locos. Good running and inexpensive HO/OO mechanisms are best but if none are suitable I will use a combination of Romford wheels, NWSL gearbox, Mashima 16mm can motor fitted with a flywheel in a solid brass chassis.

The scenery base is high density foam shaped to suit and coated with a light brown plastic paint as a base colour, followed with the usual array of scatter materials. Trees armatures are twisted wire, soldered and coated with paint. Foliage is expanded cleaning pad material, usually green in colour, coated with hair spray and sprinkled with grass material for leaves. Water is represented with a sheet of glass which is placed over a suitably painted base. It is the best wash 'n' wear water I have found.

Modelling sugar cane is generally avoided as each stalk must be made individually. Only small areas are planted to give the impression of more than what is modelled. Small meat skewers are sliced appropriately and painted before planting amongst leaf litter for these cane areas.

WIRING

Wiring is kept very simple. Figure 3 shows the track



BELOW This close-up of the Author's Marian Mills Perry 0-6-2T sitting at Canetoad Gully, gives a good idea of what can be achieved in this scale with the modification of readily available locomotive chassis from other scales. Photograph; Steve Malone

feeds. DPDT switches decide which controller powers which section. One controller is set up like a diesel loco controls which is fun to 'drive'. I plan to do a steam engine version sometime too. Points are controlled by Peco point motors.

STRUCTURES

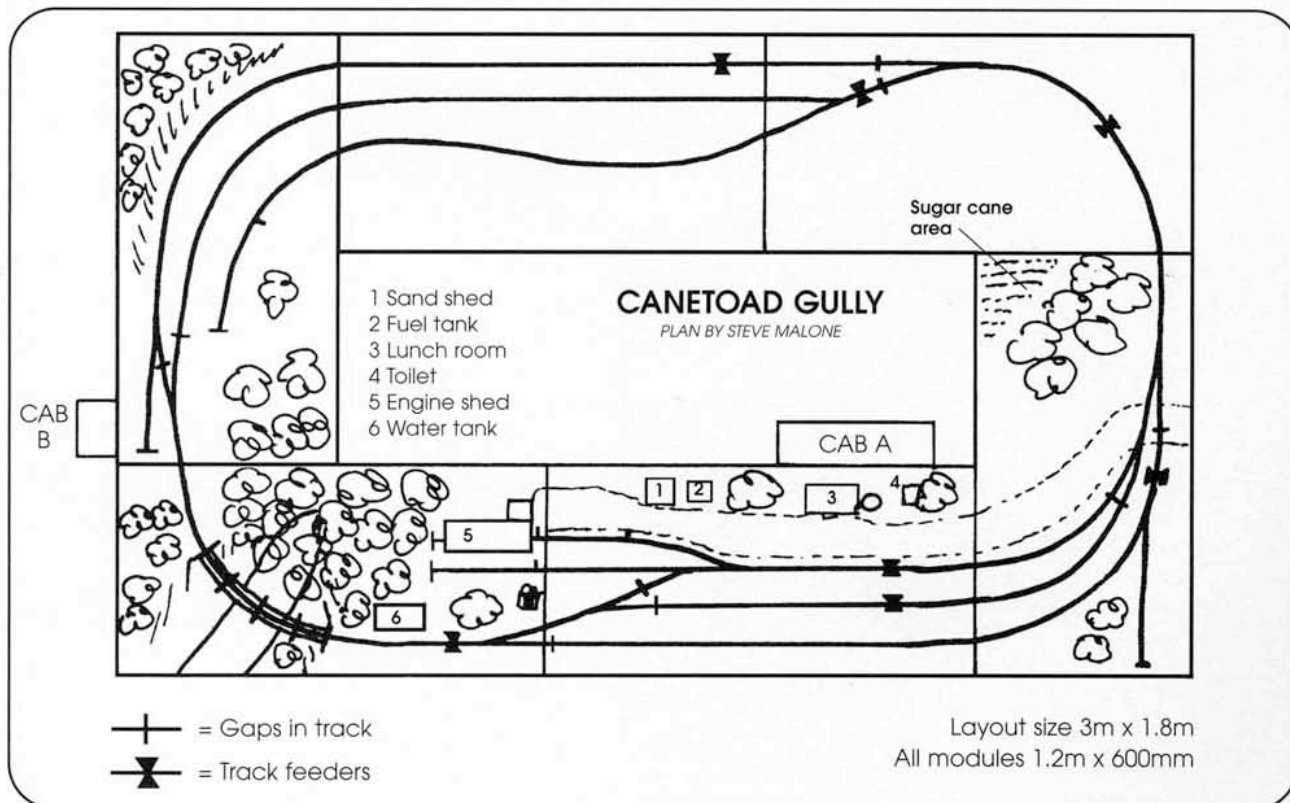
Being largely a locomotive enthusiast, building structures is not very popular so only the minimum is modelled for best effect. Structures on 'Canetoad Gully' include an engine shed with lean-to tool shed, a sand shed, lunch room and an outdoor toilet. I also have a fuel tank for diesel locos and a small water tank for thirsty steam engines.

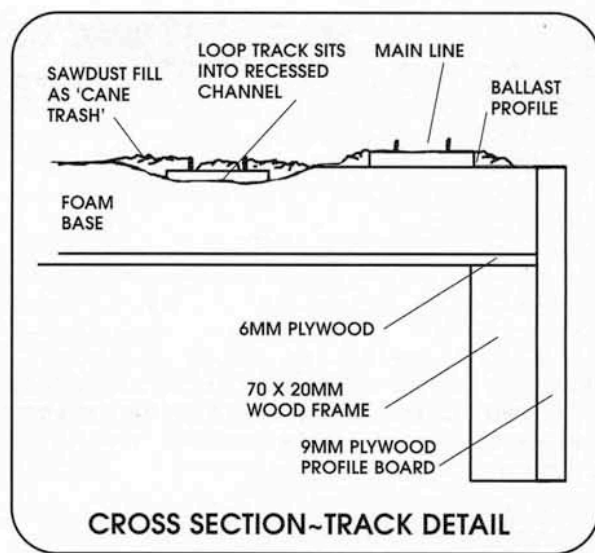
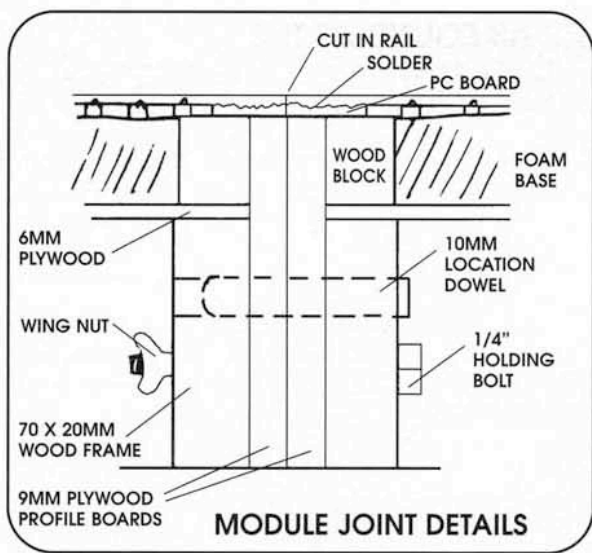
OPERATION

Operation is basic but it does allow for reasonable action for exhibition and public viewing purposes. Home operation tends to feature more switching rather than continuous running. Considering the space of just 3m x 1.8, it is possible to fit in a lot of action in 'O' scale.

LOOKING BACK

It has been a lot of fun modelling cane trains over the last ten years or so. I am very comfortable with 'O' scale and cost will depend upon the approach that an individual may choose. Special thanks to my wife Deb for her encouragement and long suffering!





RIGHT Terry Paton's trestle bridge module was a feature of the 1988 exhibition layout described in this article. The nine car freight train is hauled by a Bogie Baldwin named 'Coolum'. Drawings of this locomotive by Jim Fainges can be found elsewhere in this issue. Photograph; Steve Malone



Profile

STEVE MALONE



It probably all started in the late 1950's. My father was a train driver in North Queensland and when I was around 4 years of age, he bought me an O gauge clockwork Hornby train set. Since then I have followed one form of model trains after another. My greatest modelling interest has been Queensland railways in Sn3-1/2, however as QR has modernised, my modelling interest has turned more to 'O' scale 2' and 2' 6" gauge railways. The research and modelling of these systems has been most enjoyable and interesting.

Groups such as the Light Railway & Research Society of Australia, Australian Model Railway Association (AMRA), and the 7mm Narrow Gauge Association (UK) have been most helpful. Being a member of the AMRA (Qld branch) for almost 25 years has been very rewarding and I have held several positions over these years.

To maintain the soot in my veins, I help out with 1:1 scale models and for many years now I have helped organise steam train tours on the QR, as well as maintaining an interest in 5" gauge live steam. I am fortunate to have been able to be fireman for my father when he has driven the Bundaberg Fowler at the ANGRMS Woodford site over the past 10 years.